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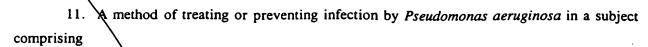
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IT IS CLAIMED:

- 1. A composition for use in treating or preventing infection by *Pseudomonas aeruginosa* comprising
- a P. aeruginosa pilin protein having an N-terminal peptide region modified to prevent self assembly of the peptide.
 - 2. The composition of claim 1, further comprising a pharmaceutically acceptable carrier in which the peptide is formulated.
 - 3. The composition of claim 1, wherein the modified N-terminal peptide region lacks an N-terminal portion of native P. aeruginosa.
 - 4. The composition of claim 3, wherein the modified N-terminal region lacks the first 15 up to the first 40 amino acids residues of native P. aeruginosa.
 - 5. The composition of claim 4, wherein the modified N-terminal region lacks the first 25 up to the first 30 amino acids residues of native P. aeruginosa.
 - 6. The composition of claim 1, wherein the N-terminal peptide region is modified to prevent alpha-helical formation in the region.
 - 7. The composition of claim 6, wherein the N-terminal peptide region is modified to contain proline residues or strings of glycine residues at positions effective to interrupt alpha-helical formation.
 - 8. The composition of claim 1, wherein the N-terminal region of the pilin peptide has been replaced by a peptide moiety capable of forming a coiled-coil homodimer or heterodimer, and the composition contains two modified pilin peptides joined through a coiled-coil heterodimer or homodimer interaction.
 - 9. The composition of claim 8, wherein modified pilin peptide has the sequence identified by SEQ ID. NOS. 2, 4, 6, 8 or 10.
- 10. The composition of claim 8, wherein the composition is a homodimer or heterodimer containing the modified pilin peptide from two different *Pseudomonas* strains.

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administering to the subject, a pharmaceutically effective amount of a P. aeruginosa pilin protein having an N-terminal peptide region modified to prevent self assembly of the peptide.

- 12. The method of claim 11, wherein the peptide is contained in an aerosolizable vehicle, and said administering includes delivering an aerosol of the peptide to the subject's airway.
- 13. The method of claim 11, wherein the modified N-terminal peptide region lacks an Nterminal portion of native P. aekuginosa.
 - 14. The method of claim 13, wherein the modified N-terminal region lacks the first 15 up to the first 40 amino acids residues of native P. aeruginosa.
 - 15. The method of claim 13, wherein the modified N-terminal region lacks the first 25 up to the first 30 amino acids residues of native P. aeruginosa.
 - 16. The method of claim 11, wherein the N-terminal peptide region is modified to prevent alpha-helical formation in the region.
 - 17. The method of claim 16, wherein the N-terminal peptide region is modified to contain proline residues or strings of glycine residues at positions effective to interrupt alpha-helical formation.
- 18. The method of claim 11, wherein the N-terminal region of the pilin peptide has been 25 replaced by a peptide moiety capable of forming a coiled-coil homodimer or heterodimer, and the composition contains two modified pilin peptides joined through a coiled-coil heterodimer or homodimer interaction.
- 19. The method of claim 18, wherein modified pilin peptide has the sequence identified by SEQ ID. NOS. 2, 4, 6, 8 or 10.